PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3502857

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the MARVELL INTERNATIONAL, LTD. CASE NO, ON PAGE 2 CHANGED TO MP5906 AND MP5906PR previously recorded on Reel 036173 Frame 0535. Assignor(s) hereby confirms the MARVELL INTERNATIONAL, LTD. CASE NO, ON PAGE 2 FROM MP5660 AND MP5660PR.	

CONVEYING PARTY DATA

Name	Execution Date
MARVELL INTERNATIONAL LTD.	08/11/2015

RECEIVING PARTY DATA

Name: MARVELL WORLD TRADE LTD.	
Street Address: L'HORIZON, GUNSITE ROAD, BRITTONS HILL	
City: ST. MICHAEL	
State/Country: CALIFORNIA	
Postal Code: 95054	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14797393

CORRESPONDENCE DATA

Fax Number: (408)222-2755

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 4082222500

Email: syzemore@marvell.com

Correspondent Name: NEILESH PATEL
Address Line 1: 5488 MARVELL LANE

Address Line 4: SANTA CLARA, CALIFORNIA 95054

ATTORNEY DOCKET NUMBER:	MP5906
NAME OF SUBMITTER:	NEILESH PATEL
SIGNATURE:	/NEILESH PATEL/
DATE SIGNED:	08/27/2015

Total Attachments: 7

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PATENT 503456232 REEL: 036501 FRAME: 0951

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PATENT REEL: 036501 FRAME: 0952

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3454492

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARVELL INTERNATIONAL LTD.	07/13/2015

RECEIVING PARTY DATA

Name:	MARVELL WORLD TRADE LTD.	
Street Address: L'HORIZON, GUNSITE ROAD, BRITTONS HILL		
City: ST. MICHAEL		
State/Country: BARBADOS		
Postal Code: BB14027		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14797393

CORRESPONDENCE DATA

Fax Number: (408)222-2755

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 4082222500

Email: syzemore@marvell.com

Correspondent Name: NEILESH PATEL
Address Line 1: 5488 MARVELL LANE

Address Line 4: SANTA CLARA, CALIFORNIA 95054

ATTORNEY DOCKET NUMBER:	MP5906
NAME OF SUBMITTER:	NEILESH PATEL
SIGNATURE:	/NEILESH PATEL/
DATE SIGNED:	07/24/2015

Total Attachments: 4

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PATENT REEL: 036501 FRAME: 0953

ASSIGNMENT Corporate

Marvell International Ltd., a corporation of Bermuda, having a place of business at Canon's Court, 22 Victoria Street, Hamilton, HM12, Bermuda (hereafter the "Assignor"), is the owner by respective Assignment of United States Patent Application identified below (hereafter sometimes called the "Patent Application").

Marvell World Trade Ltd., a corporation of Barbados, having a place of business at L'Horizon, Gunsite Road, Brittons Hill, St. Michael, Barbados BB14027 (hereafter the "Assignee"), desires to acquire all of the rights to the Patent Application and all inventions described and claimed therein.

THEREFORE, in consideration of the sum of One Dollar (\$1.00) US or equivalent and other good and valuable consideration paid to it, Assignor hereby sells and assigns to the Assignee the entire right, title and interest in and to the Patent Application identified below, and all inventions described and claimed therein, in any and all Letters Patent therefore, and in any and all reissues, extensions, renewals, reexaminations, divisions, continuations and foreign counterparts of such applications or Letters Patent to the full end of the term or terms for which such Letters Patent issue, such entire right, title and interest to be held and enjoyed by the above-named Assignee the same as they would have been held and enjoyed by the Assignor had this Assignment and sale not been made.

Marvell International, Ltd. Case No.	U. S. Serial No.	U.S. Filing Date	<u>Title</u>
MP5906	To be Assigned	Herewith	METHOD AND APPARATUS FOR DETERMINING READ-HEAD DEVIATION USING ORTHOGONAL PREAMBLES
MP5906PR	62/024,251	July 14, 2014	OFF-TRACK DETECTION WITH ORTHOGONAL PREAMBLE

By its undersigned representative, the Assignor agrees

a. to execute all papers necessary in connection with the Patent Application and any continuing, divisional, reissue, reexamination or corresponding application thereof and also to execute separate Assignment in connection with such application as the Assignee may deem necessary or expedient;

page 1/2

TAICHREET

PATENT

- b. to execute all papers necessary in connection with any interference which may be declared concerning the Patent Application or any continuation, division, reissue or reexamination thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference; and
- c. to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee on any of the Patent Application and on any continuation, division, reissue or reexamination of any of the Patent Application.

The Assignor hereby covenants that it has the full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict therewith.

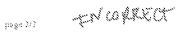
Marvell International, Ltd., a Bermuda corporation, certifies that it is the Assignee of the entire right, title and interest in the Patent Application identified above by virtue of Assignment from the inventors of the Patent Application identified above. Assignment to be recorded in the Patent and Trademark Office as identified below.

Marvell International, Ltd. Case No.	U.S. Serial No.	Assignment Execution Date
MP5660	To be Assigned	07/13/2015
MP5660PR	62/024,251	07/13/2015

The undersigned has reviewed the documents in the Patent Application identified above and, to the best of undersigned's knowledge and belief, title is in the Assignor identified above.

The undersigned is empowered to sign this certificate on behalf of the Assignor.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



PATENT

IN WITNESS WHEREOF, executed by the Assignor's undersigned representative on the date following the undersigned's name.

Marvell International Ltd.

By:

Sherman Taylor

Title: General Manager

Date: 15 July 3015

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-01/01/40x

$\underline{\text{ASSIGNMENT}}$

Corporate

Marvell International Ltd., a corporation of Bermuda, having a place of business at Canon's Court, 22 Victoria Street, Hamilton, HM12, Bermuda (hereafter the "Assignor"), is the owner by respective Assignment of United States Patent Application identified below (hereafter sometimes called the "Patent Application").

Marvell World Trade Ltd., a corporation of Barbados, having a place of business at L'Horizon, Gunsite Road, Brittons Hill, St. Michael, Barbados BB14027 (hereafter the "Assignee"), desires to acquire all of the rights to the Patent Application and all inventions described and claimed therein.

THEREFORE, in consideration of the sum of One Dollar (\$1.00) US or equivalent and other good and valuable consideration paid to it, Assignor hereby sells and assigns to the Assignee the entire right, title and interest in and to the Patent Application identified below, and all inventions described and claimed therein, in any and all Letters Patent therefore, and in any and all reissues, extensions, renewals, reexaminations, divisions, continuations and foreign counterparts of such applications or Letters Patent to the full end of the term or terms for which such Letters Patent issue, such entire right, title and interest to be held and enjoyed by the above-named Assignee the same as they would have been held and enjoyed by the Assignor had this Assignment and sale not been made.

Marvell International, Ltd. Case No.	U.S.Serial No.	U.S.Filing Date	Title
MP 5906	14/797,393	07/13/2015	METHOD AND APPARATUS FOR DETERMINING READ-HEAD DEVIATION USING ORTHOGONAL PREAMBLES
MP5986PR	62/024,251	July 14, 2014	OFF-TRACK DETECTION WITH ORTHOGONAL PREAMBLE

By its undersigned representative, the Assignor agrees

a. to execute all papers necessary in connection with the Patent Application and any continuing, divisional, reissue, reexamination or corresponding application thereof and also to execute separate Assignment in connection with such application as the Assignee may deem necessary or expedient;

page 1/2

- b. to execute all papers necessary in connection with any interference which may be declared concerning the Patent Application or any continuation, division, reissue or reexamination thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference; and
- c. to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee on any of the Patent Application and on any continuation, division, reissue or reexamination of any of the Patent Application.

The Assignor hereby covenants that it has the full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict therewith.

Marvell International, Ltd., a Bermuda corporation, certifies that it is the Assignee of the entire right, title and interest in the Patent Application identified above by virtue of Assignment from the inventors of the Patent Application identified above. Assignment to be recorded in the Patent and Trademark Office as identified below.

Marvell International, Ltd. Case No.	U. S. Serial No.	Assignment Execution Date
MP5906	14/797,393	07/13/2015
MP5906PR	62/024,251	07/13/2015

The undersigned has reviewed the documents in the Patent Application identified above and, to the best of undersigned's knowledge and belief, title is in the Assignor identified above.

The undersigned is empowered to sign this certificate on behalf of the Assignor.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

PATENT

IN WITNESS WHEREOF, executed by the Assignor's undersigned representative on the date following the undersigned's name.

Marvell International Ltd.

By: Sherman Taylor

Title: General Manager

Date: 11th August 2015

page 3/2